



IFWO

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/800,449

DATE: 09/17/2004

TIME: 09:00:14

Input Set : N:\Crf3\RULE60\10800449.raw.txt

Output Set: N:\CRF4\09172004\J800449.raw

1 <110> APPLICANT: Sun, Lee-Hwei K  
 2 Sun, Bill  
 3 Sun, Cecily R  
 4 <120> TITLE OF INVENTION: Fc fusion proteins of human granulocyte colony-stimulaing  
 factor with  
 5 increased biological activities  
 6 <130> FILE REFERENCE: 03SUN2001  
 7 <140> CURRENT APPLICATION NUMBER: US/10/800,449  
 C--> 8 <141> **CURRENT FILING DATE: 2004-03-15**  
 9 <150> PRIOR APPLICATION NUMBER: US/09/968,362  
 10 <151> PRIOR FILING DATE: 2001-10-01  
 12 <160> NUMBER OF SEQ ID NOS: 28  
 13 <170> SOFTWARE: PatentIn version 3.1  
 15 <210> SEQ ID NO: 1  
 16 <211> LENGTH: 30  
 17 <212> TYPE: DNA  
 18 <213> ORGANISM: Artificial Sequence  
 19 <220> FEATURE:  
 20 <223> OTHER INFORMATION: PCR primer  
 21 <400> SEQUENCE: 1  
 22 cccaagcttc ccagacccat ggctggacct  
 24 <210> SEQ ID NO: 2  
 25 <211> LENGTH: 27  
 26 <212> TYPE: DNA  
 27 <213> ORGANISM: Artificial sequence  
 28 <220> FEATURE:  
 29 <223> OTHER INFORMATION: PCR primer  
 30 <400> SEQUENCE: 2  
 31 cggatccggg ctgggcaagg tggcgta  
 33 <210> SEQ ID NO: 3  
 34 <211> LENGTH: 20  
 35 <212> TYPE: DNA  
 36 <213> ORGANISM: Artificial Sequence  
 37 <220> FEATURE:  
 38 <223> OTHER INFORMATION: PCR primer  
 39 <400> SEQUENCE: 3  
 40 gagcgcaaatt gttgtgtcga  
 42 <210> SEQ ID NO: 4  
 43 <211> LENGTH: 28  
 44 <212> TYPE: DNA  
 45 <213> ORGANISM: Artificial Sequence  
 46 <220> FEATURE:  
 47 <223> OTHER INFORMATION: PCR primer  
 48 <400> SEQUENCE: 4

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Input Set : N:\Cr3\RULE60\10800449.raw.txt

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49      ggaattctca tttacccgga gacaggga                28
51 <210> SEQ ID NO: 5
52 <211> LENGTH: 29
53 <212> TYPE: DNA
54 <213> ORGANISM: Artificial Sequence
55 <220> FEATURE:
56 <223> OTHER INFORMATION: PCR primer
57 <400> SEQUENCE: 5
58      tggttttctc gatggaggct gggaggcct                29
60 <210> SEQ ID NO: 6
61 <211> LENGTH: 29
62 <212> TYPE: DNA
63 <213> ORGANISM: Artificial Sequence
64 <220> FEATURE:
65 <223> OTHER INFORMATION: PCR primer
66 <400> SEQUENCE: 6
67      aggcctccca gcctccatcg agaaaacca                29
69 <210> SEQ ID NO: 7
70 <211> LENGTH: 69
71 <212> TYPE: DNA
72 <213> ORGANISM: Artificial Sequence
73 <220> FEATURE:
74 <223> OTHER INFORMATION: PCR primer
75 <400> SEQUENCE: 7
76      cggatccggt ggcggttccg gtggaggcgg aagcggcggt ggaggatcag agcgcaaattg        60
77      ttgtgtcga                                         69
79 <210> SEQ ID NO: 8
80 <211> LENGTH: 21
81 <212> TYPE: DNA
82 <213> ORGANISM: Artificial Sequence
83 <220> FEATURE:
84 <223> OTHER INFORMATION: PCR primer
85 <400> SEQUENCE: 8
86      gagtccaaat atggtccccc a                        21
88 <210> SEQ ID NO: 9
89 <211> LENGTH: 28
90 <212> TYPE: DNA
91 <213> ORGANISM: Artificial Sequence
92 <220> FEATURE:
93 <223> OTHER INFORMATION: PCR primer
94 <400> SEQUENCE: 9
95      ggaattctca tttacccaga gacaggga                28
97 <210> SEQ ID NO: 10
98 <211> LENGTH: 21
99 <212> TYPE: DNA
100 <213> ORGANISM: Artificial Sequence
101 <220> FEATURE:
102 <223> OTHER INFORMATION: PCR primer
103 <400> SEQUENCE: 10

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104      cctgagttcg cgggggggacc a
106 <210> SEQ ID NO: 11
107 <211> LENGTH: 60
108 <212> TYPE: DNA
109 <213> ORGANISM: Artificial Sequence
110 <220> FEATURE:
111 <223> OTHER INFORMATION: PCR primer
112 <400> SEQUENCE: 11
113      gagtccaaat atggtccccc atgccaccca tgcccagcac ctgagttcgc gggggggacca
115 <210> SEQ ID NO: 12
116 <211> LENGTH: 70
117 <212> TYPE: DNA
118 <213> ORGANISM: Artificial Sequence
119 <220> FEATURE:
120 <223> OTHER INFORMATION: PCR primer
121 <400> SEQUENCE: 12
122      cggatccggt ggcggttccg gtggaggcgg aagcggcggt ggaggatcag agtccaaata
123      tggccccca
125 <210> SEQ ID NO: 13
126 <211> LENGTH: 21
127 <212> TYPE: DNA
128 <213> ORGANISM: Artificial Sequence
129 <220> FEATURE:
130 <223> OTHER INFORMATION: PCR primer
131 <400> SEQUENCE: 13
132      gacaaaactc acacatgccc a
134 <210> SEQ ID NO: 14
135 <211> LENGTH: 23
136 <212> TYPE: DNA
137 <213> ORGANISM: Artificial Sequence
138 <220> FEATURE:
139 <223> OTHER INFORMATION: PCR primer
140 <400> SEQUENCE: 14
141      acctgaagtc gcggggggac cgt
143 <210> SEQ ID NO: 15
144 <211> LENGTH: 55
145 <212> TYPE: DNA
146 <213> ORGANISM: Artificial Sequence
147 <220> FEATURE:
148 <223> OTHER INFORMATION: PCR primer
149 <400> SEQUENCE: 15
150      gacaaaactc acacatgccc accgtgccc gacacctgaag tcgcgggggg accgt
152 <210> SEQ ID NO: 16
153 <211> LENGTH: 70
154 <212> TYPE: DNA
155 <213> ORGANISM: Artificial Sequence
156 <220> FEATURE:
157 <223> OTHER INFORMATION: PCR primer
158 <400> SEQUENCE: 16

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## RAW SEQUENCE LISTING

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159      cggatccggt ggcgggtccg gtggaggcgg aagcggcggt ggaggatcag acaaaactca      60
160      cacatgccc      70
162 <210> SEQ ID NO: 17
163 <211> LENGTH: 1368
164 <212> TYPE: DNA
165 <213> ORGANISM: Artificial Sequence
166 <220> FEATURE:
167 <223> OTHER INFORMATION: hG-CSF-L-vFc gamma2 (Figure 2A)
168 <400> SEQUENCE: 17
169      aagcttccca gacccatggc tggacctgcc acccagagcc ccatgaagct gatggccctg      60
170      cagctgctgc tgtggcacag tgcactctgg acagtgcagg aagccacccc cctggggccct      120
171      gccagctccc tgccccagag ctctctgctc aagtgttag agcaagttag gaagatccag      180
172      ggcgatggcg cagcgctcca ggagaagctg tgtgccacct acaagctgtg ccaccccgag      240
173      gagctggtgc tgctcggaca ctctctgggc atcccttggg ctcccttgag cagctgcccc      300
174      agccaggccc tgcagctggc aggtctgttg agccaactcc atagcggcct tttcctctac      360
175      caggggctcc tgcaggccct ggaagggatc tcccccgagt tgggtccac cttggacaca      420
176      ctgcagctgg acgtcgcca ctttgcacc accatctggc agcagatgga agaactggga      480
177      atggccccctg ccttcagcc caccagggt gccatgccgg ccttcgcctc tgctttccag      540
178      cgccgggcag gagggtcct agttgcctcc catctgcaga gcttcctgga ggtgtcgtac      600
179      cgcgttctac gccacctgc ccagcccga tccggtggcg gttccggtgg aggcggaagc      660
180      ggcggtggag gatcagagc caaatgttgt gtcgagtgcc caccgtgccc agcaccacct      720
181      gtggcaggac cgtcagtctt cctcttccc ccaaaaccca aggacacct catgatctcc      780
182      cggacccctg aggtcacgtg cgtggtggtg gacgtgagcc acgaagacc cgaggtccag      840
183      ttcaactggt acgtggacgg cgtggagggt cataatgcca agacaaagcc acgggaggag      900
184      cagttcaaca gcacgttccg tgtggtcagc gtccctaccg ttgtgcacca ggactggtg      960
185      aacggcaagg agtacaagt caaggtctcc aacaaaggcc tcccagcctc catcgagaaa      1020
186      accatctcca aaaccaaagg gcagccccga gaaccacagg tgtacacct gccccatcc      1080
187      cgggaggaga tgaccaagaa ccaggtcagc ctgacctgcc tgggtcaaagg cttctacccc      1140
188      agcgacatcg ccgtggagt ggagagcaat gggcagccgg agaacaacta caagaccaca      1200
189      cctcccatgc tggactccga cggctcctt ttcctctaca gcaagctcac cgtggacaag      1260
190      agcaggtggc agcaggggaa cgtcttctca tgctccgtga tgcattgagg tctgcacaac      1320
191      cactacacgc agaagagcct ctccctgtct ccgggtaaag gagaattc      1368
193 <210> SEQ ID NO: 18
194 <211> LENGTH: 448
195 <212> TYPE: PRT
196 <213> ORGANISM: Artificial Sequence
197 <220> FEATURE:
198 <223> OTHER INFORMATION: hG-CSF-L-vFc gamma2 with a 30-amino acid leader peptide
(Figure
199      2A)
200 <400> SEQUENCE: 18
201      Met Ala Gly Pro Ala Thr Gln Ser Pro Met Lys Leu Met Ala Leu Gln
202      1              5              10              15
203      Leu Leu Leu Trp His Ser Ala Leu Trp Thr Val Gln Glu Ala Thr Pro
204      20              25              30
205      Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys Cys Leu
206      35              40              45
207      Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln Glu Lys
208      50              55              60
209      Leu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu Glu Leu Val Leu Leu

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Input Set : N:\Crf3\RULE60\10800449.raw.txt

Output Set: N:\CRF4\09172004\J800449.raw

```

210      65              70              75              80
211 Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu Ser Ser Cys Pro Ser
212              85              90              95
213 Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln Leu His Ser Gly Leu
214              100             105             110
215 Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu Gly Ile Ser Pro Glu
216              115             120             125
217 Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp Val Ala Asp Phe Ala
218              130             135             140
219 Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly Met Ala Pro Ala Leu
220              145             150             155             160
221 Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala Ser Ala Phe Gln Arg
222              165             170             175
223 Arg Ala Gly Gly Val Leu Val Ala Ser His Leu Gln Ser Phe Leu Glu
224              180             185             190
225 Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln Pro Gly Ser Gly Gly
226              195             200             205
227 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Arg Lys Cys
228              210             215             220
229 Cys Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser
230              225             230             235             240
231 Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg
232              245             250             255
233 Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro
234              260             265             270
235 Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala
236              275             280             285
237 Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val
238              290             295             300
239 Ser Val Leu Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr
240              305             310             315             320
241 Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ala Ser Ile Glu Lys Thr
242              325             330             335
243 Ile Ser Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu
244              340             345             350
245 Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys
246              355             360             365
247 Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser
248              370             375             380
249 Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp
250              385             390             395             400
251 Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser
252              405             410             415
253 Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala
254              420             425             430
255 Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
256              435             440             445
258 <210> SEQ ID NO: 19
259 <211> LENGTH: 1371

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**RAW SEQUENCE LISTING ERROR SUMMARY**

PATENT APPLICATION: US/10/800,449

DATE: 09/17/2004

TIME: 09:00:15

Input Set : N:\Crf3\RULE60\10800449.raw.txt

Output Set: N:\CRF4\09172004\J800449.raw

**Invalid Line Length:**

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 4

Seq#:18; Line(s) 198

Seq#:20; Line(s) 294

Seq#:22; Line(s) 391

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/800,449

DATE: 09/17/2004

TIME: 09:00:15

Input Set : N:\Crf3\RULE60\10800449.raw.txt

Output Set: N:\CRF4\09172004\J800449.raw

L:8 M:271 C: Current Filing Date differs, Replaced Current Filing Date